



DATE: January 22, 1981

TO: Division File

FROM: M. Gifford

SUBJECT: DU PAGE COUNTY - L.P.C. - 04380301
LISLE TOWNSHIP/GREENE VALLEY LANDFILL PERMIT INCONSISTENCIES

EPA Region 5 Records Ctr.



334691

On the above date I met Scott Otterson from Waste Management and Scott Gerrick from the DuPage County Forest Preserve at the subject site to discuss bottom seal construction in the new trench. Lou Bohlander, site general manager accompanied us during the inspection.

The western one-third of the trench has been excavated 10 feet below grade and Lou said he is ready to initiate placement of the seal. The extent of the sand and gravel deposit has increased in size with further excavation and is now approximately 300 feet east-west by 200 feet north-south. Observations indicate that as trench excavation continues eastward, additional sand and gravel will be encountered.

The south wall of the new trench has been vertically cut to within 10 feet of the refuse-filled trench to the south. This cut reveals approximately 7 feet of virgin clay till above the sand and gravel, and is located directly south of boring T-1 which was drilled January 12, 1981 (refer to memo dated January 12, 1981 for more information on the borings by Testing Services Corp.). As the borings indicate the thickness of clay till rapidly increases as one progresses southward beneath the fill; however, there is a small portion of the fill that overlies less than 10 feet of undisturbed clay.

In reviewing the permit for this facility, an unusual condition has been noted by both Scott Otterson and myself. Sheet 7 of 12 of the Development Plans reveals that if during trench excavation 10 feet of virgin clay material is not maintained beneath trench floors, bottom seals shall be constructed having a minimum thickness of 6 feet. To place this in perspective, if it is determined that there exists only 8 feet of undisturbed clay between the refuse and pervious material, then it is required that this 8 feet be excavated and backfilled with a 6 foot seal.

To further complicate this situation, under PART V - DISCUSSION & RECOMMENDATIONS, Section "2" of Recommendations for Protection of Surface and Ground Waters states, "Permeable layers encountered within five feet of the bottom of the excavation, or in perimeter slopes, should be sealed with an adequate thickness of impermeable material, compacted and keyed to adjacent natural impervious material, to provide a total of five feet of impervious soil and thus insure adequate containment of leachate and gases."

In the opinion of the author, Waste Management is unaware of this latter condition referencing the minimum five foot thickness of impervious material. This is based on conversations with Scott Otterson and Lou Bohlander. Scott Otterson has agreed

Page 2 Continued

to submit a request for a supplemental permit which would clarify the conditions of bottom seal requirements and include a proposed standard of 6 feet as the minimum seal thickness, be it in-situ or constructed. In addition, information will be provided regarding compaction and density tests to be performed by Waste Management. These field tests will provide data verifying that maximum compaction is being achieved and that permeability meets the established guidelines of 1×10^{-7} cm/sec. This proposed site modification is to be concurrent with the life of the landfill.

With the above information in mind, it is recommended that this permit application be acted upon expeditiously and favorably. This supplemental permit, if granted, would establish acceptable standards and resolve the inconsistencies that currently exist in the operational permit.

cc: Northern Region
Bill Child
Tom Cavanagh

7300 College Drive • Palos Heights, Illinois 60463
P.O. Box 583

SHEET
OF

ELD